Translation





PCT Rec'd PST/PTO 13 MAY 2005

INTERNATIONAL PRELIMINARY EXAMINATION REPORT 10/534855

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference CFE030148/SV | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | | | | | | |
|---|--|--|--|--|--|--|--|
| International application No. PCT/FR2003/003309 | International filing date (day/month/year) Priority date (day/month/year) 14 novembre 2002 (14.11.2002) | | | | | | |
| International Patent Classification (IPC) or national classification and IPC G06F 17/50 | | | | | | | |
| Applicant EADS TELECOM | | | | | | | |
| This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. This REPORT consists of a total of 5 sheets. including this cover sheet. This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of sheets. This report contains indications relating to the following items: | | | | | | | |
| Basis of the report II | | | | | | | |
| Date of submission of the demand 20 avril 2004 (20.04) | Date of completion of this report 03 February 2005 (03.02.2005) | | | | | | |
| Name and mailing address of the IPEA/E | | | | | | | |
| Facsimile No. | Telephone No. | | | | | | |





Internation No.

PCT/FR2003/003309

| I. Basis of the report | | | | | | | | |
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| 1. With | regard to | the elements of the international application:* | | | | | | |
| | the inter | national application as originally filed | | | | | | |
| \boxtimes | the desc | ription: | | | | | | |
| | pages | 1-26 | . as originally filed | | | | | |
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| | pages | , , | . as originally filed | | | | | |
| | pages | . as amended (together | | | | | | |
| | pages . | | . filed with the demand | | | | | |
| | pages | I-41 . filed with the letter of | 16 April 2004 (16.04.2004) | | | | | |
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| <u>'</u> | • | nce listing part of the description: | | | | | | |
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| | pages | filed with the letter of | | | | | | |
| With regard to the language. all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language which is: the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3). With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing: contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. | | | | | | | | |
| | • | atement that the information recorded in computer readable form is identical urnished. | to the written sequence listing has | | | | | |
| 4. | The ar | the drawings. sheets/fig | | | | | | |
| 5. | | port has been established as if (some of) the amendments had not been made. s I the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** | ince they have been considered to go | | | | | |
| in t and | * Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17). | | | | | | | |
| ** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report. | | | | | | | | |

| v. | Reasoned statement under Article 3 citations and explanations supporti | 5(2) with regard to novelting such statement | y, inventive step or industrial appl | icability; |
|----|--|--|--------------------------------------|------------|
| 1. | Statement | | | |
| | Novelty (N) | Claims | 1-41 | YES |
| | | Claims | | NO |
| | Inventive step (IS) | Claims | | YES |
| | | Claims | 1-41 | NO |
| | Industrial applicability (IA) | Claims | 1-41 | YES |
| | | Claims | | NO |
| 2 | Citations and applicati | | | |

- Citations and explanations
- 1. Reference is made to the following documents:
 - D1: US-A-6-092 104 (KELLY CHRISTOPHER T) 18 July 2000 (2000-07-18);

 - D3: EP-A-0 801 492 (MATSUSHITA ELECTRIC IND CO LTD)
 15 October 1997 (1997-10-15).
- 2. D1 describes a method for analysing the security of an information system, such as the one defined in claim 1 of the present application, which method includes a step of modelling the information system and a step of simulating potential attacks on said information system (see D1, the introduction on pages 320-321 and the passage on page 331).

The subject matter of claim 1 differs from the prior art known from document D1 in that said claim specifies that the modelling step is initiated at a system component state value referred to as "sound" and that, in the event of a successful attack, the component state shifts to an "unsound" value.

However, even though document D1 does not mention the use of a "soundness" criterion for the state in order to evaluate the success of the attack, it is obvious that taking this criterion into consideration does not lead to any major operational differences between the security analysis method described in the application and the one described in D1.

It is also obvious that, in the methodology for modelling and attack simulation described in document D1, the propagation relationships that are capable of conveying attacks are bound to be taken into consideration when modelling the relationships between components (in this regard, see also the passages in sections 2 and 3 on pages 321 and 322 of D1).

Moreover, the subject matter of claim 1 does not specify which predicates or actions are included in the behaviour rules and, as a result, said predicates or actions cannot be differentiated from the predicates or actions in the behaviour rules used in the methodology described in D1.

In view of the above, it would be a routine technical step for a person skilled in the art to combine all of the features disclosed in claim 1. As a result, the subject matter of claim 1 does not involve an inventive step (PCT Article 33(3)).

- 3. Dependent claims 2-38 do not contain any features which, in combination with the features of any one of the claims to which they refer, might define subject matter that fulfils the PCT requirement of inventive step because said features are considered to be obvious operating features in a method for analysing the security of an information system such as the method known from D1.
- 4. Contrary to the requirements of PCT Rule 5.1(a)(ii), the description does not indicate the relevant prior art disclosed in document D1, nor does it cite said document. The same is true of documents D2 and D3.